

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO**

Civil Action No. _____

SECURITY WATER DISTRICT and
PIKES PEAK COMMUNITY FOUNDATION,

Plaintiffs,

v.

UNITED STATES OF AMERICA,

Defendant.

COMPLAINT

SUMMARY OF CLAIM

1. Plaintiffs SECURITY WATER DISTRICT (“Security”) and PIKES PEAK COMMUNITY FOUNDATION (“Foundation”), by and through their undersigned counsel, file this action against the UNITED STATES OF AMERICA pursuant to the Federal Tort Claims Act (“FTCA”), 28 U.S.C. §§ 2671-2680.

2. Plaintiffs seek to be made whole for the property damages they have suffered as a result of Defendant’s contamination of groundwater relied upon by Plaintiffs. Defendant, through the United States Air Force (“USAF”), used firefighting foam containing toxic per- and polyfluoroalicyl substances (“PFAS”) on Peterson Air Force Base (“Peterson AFB”) for several decades. PFAS, which also often are referred to as perfluorinated chemicals (“PFCs”) are a group of toxic, extremely persistent, and bioaccumulative synthetic chemicals. Defendant disposed of the spent firefighting foam on land and water at Peterson AFB until at least 2018.

The PFC component of the discarded firefighting foam has entered the groundwater and migrated, and continues to migrate, from Peterson AFB downgradient to groundwater wells owned by the Plaintiffs and historically used by Plaintiffs to serve approximately 19,000 municipal water customers and to irrigate vegetable crops.

3. Because of Defendant's disposal of PFCs in violation of its own mandatory requirements and the resulting groundwater contamination, Plaintiffs have incurred, and will continue to incur, significant expenses and losses associated with shutting down their wells, securing alternative water supplies, ceasing agricultural operations, and otherwise responding to and mitigating the impacts of the contamination.

JURISDICTION AND VENUE

4. This Court has jurisdiction to hear this matter pursuant to 28 U.S.C. § 1346(b)(1).

5. Peterson AFB, Security, and the Foundation all are located in Colorado and the actions complained of took place in Colorado. Therefore, this Court is the proper venue for this action. 28 U.S.C. §§ 1391(b)(2) and 1402(b).

6. Plaintiffs discovered Defendant's responsibility for the PFC contamination in August 2016 when the Air Force released its Final Preliminary Assessment Report for Perfluorinated Compounds at Peterson Air Force Base, El Paso County, Colorado.

7. On or about April 18, 2018, Security and the Foundation each submitted an administrative claim to the United States Air Force for damages pursuant to 28 U.S.C. § 2675(a); 28 C.F.R. § 14.2; and 32 C.F.R. §§ 842.4 – 842.7. On September 6, 2018, less than six months prior to this filing, the United States Air Force issued a denial of both claims. Therefore, the

Plaintiffs have exhausted their administrative remedies and timely filed this action. 28 U.S.C. §§ 2401(b) and 2675.

PLAINTIFFS' CLAIMS SATISFY FTCA REQUIREMENTS

8. Claims submitted pursuant to the FTCA must meet the requirements set forth in 28 U.S.C. § 1346(b)(1) by being “civil actions on claims against the United States, for money damages, accruing on and after January 1, 1945, for injury or loss of property, or personal injury or death caused by the negligent or wrongful act or omission of any employee of the Government while acting within the scope of his office or employment, under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred.”

9. Additionally, under the so-called discretionary function exception, no liability shall lie for any claim “based upon an act or omission of an employee of the Government, exercising due care, in the execution of a statute or regulation, whether or not such statute or regulation be valid, or based upon the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a federal agency or an employee of the Government, whether or not the discretion involved be abused.” 28 U.S.C. § 2680(a).

10. This “discretionary function” exception is inapplicable if a government employee violated a mandatory directive or used an impermissible exercise of judgment. *Berkovitz v. United States*, 486 U.S. 531, 535-37 (1988).

11. The Plaintiffs hereby assert civil claims for money damages, which accrued after 1945, for property damages and losses, which can be shown were proximately caused by violations of mandatory directives and impermissible exercises of judgment by employees and officers of the

Air Force under circumstances where the United States, if a private person, would be liable for trespass, nuisance, and negligence under Colorado law.

PARTIES AND GENERAL ALLEGATIONS

12. Plaintiff Security is a water district, which was formed as a special district pursuant to the Colorado Special District Act, C.R.S. § 32-1-102. In Colorado, special districts are quasi-municipal corporations and political subdivisions. C.R.S. § 32-1-103(20). The purpose of special districts is to “serve a public use and . . . promote the health, safety, prosperity, security, and general welfare of the inhabitants of such districts.” C.R.S. § 32-1-102(1). Water districts have the additional purposes of “supply[ing] water for domestic and other public and private purposes by any available means and provid[ing] all necessary or proper reservoirs, treatment works and facilities, equipment, and appurtenances incident thereto.” C.R.S. § 32-1-103(25). To fulfill their purposes, water districts are empowered to “sue,” C.R.S. § 32-1-1001(1)(c), and “exercise all rights and powers necessary or incidental to or implied from the specific powers granted to special districts.” C.R.S. § 32-1-1001(1)(n).

13. Security’s principal place of business is located at 231 Security Blvd., Colorado Springs, El Paso County, Colorado 80911. Security’s service area encompasses approximately five square miles in El Paso County, Colorado, and approximately 19,000 customers. Approximately eighty-five percent (85%) of Security’s customers are residential and use water for drinking and domestic purposes.

14. Until September 2016, one of Security’s primary water sources was groundwater from the Widefield and Windmill Gulch Aquifers. The Widefield and Windmill Gulch Aquifers historically have supplied about half of Security’s water requirements.

15. Security owns Colorado water rights in the Widefield and Windmill Gulch Aquifers that the District Court for Water Division 2, State of Colorado, confirmed and awarded in decrees in Case Nos. W-103 to W-111, Case No. W-112, Case No. 116, Case No. 116, Case No. W-347, Case No. W-400, Case No. W-578, Case No. W-664, Case No. W-1551, Case No. W-3174, Case No. 4212, Case No. W-4766, Case No. 1984CW130, Case No. 1990CW28, Case No. 2001CW149, Case No. 2006CW119, Case No. 2006CW126, Case No. 2006CW117, Case No. 2007CW51, Case No. 2009CW67, Case No. 2009CW92, Case No. 2012CW99. These decrees confirm a priority of appropriation for withdrawal and use of water from the Widefield and Windmill Gulch Aquifers, and set forth plans for augmentation using Security's senior decreed water rights that allow and replace well depletions to Fountain Creek, the main drainage to which the Widefield and Windmill Gulch Aquifers are tributary.

16. Security owns and operates a water supply system that consists of twenty-four (24) active wells, associated distribution systems, and the land on which those wells and other facilities are located. Pursuant to Security's decreed water rights, this system withdraws, treats and delivers water from the Widefield and Windmill Gulch Aquifers to customers for domestic, commercial, industrial, and other uses. Security's decreed Colorado water rights also include rights to construct additional wells.

17. The Foundation is a nonprofit Colorado corporation that invests and administers Charitable funds for programs dedicated to improving the quality of life in the Colorado Springs area.

18. The Foundation's principal place of business is located at 102 S. Tejon Street, Suite 530, Colorado Springs, El Paso County, Colorado 80903. The Foundation owns real property in El

Paso County, Colorado, with an address of 5210 US-85, Colorado Springs, Colorado 80911, which is known as the Venetucci Farm.

19. The Foundation owns Colorado water rights in the Widefield Aquifer that the District Court for Water Division 2, State of Colorado, confirmed and awarded by decree in Case Nos. W-103, W-104, W-105, W-106, W-107, W-108, W-109, W-110, and W-111, and W-568. These decrees confirmed a priority of appropriation for withdrawal and use of water from the Widefield Aquifer.

20. The Foundation owns and operates groundwater wells located on the Venetucci Farm. Until July 2016, the Foundation, pursuant to its decreed water rights, withdrew water from those wells to irrigate produce and vegetables at the Venetucci Farm, which were sold to the public.

21. The Foundation also leases a portion of its groundwater to Security Water District and Widefield Water and Sanitation District (“Widefield”), and those entities sublease a portion of the Foundation’s groundwater rights to the City of Fountain, all for use in their municipal water supply systems.

22. Decreed Colorado water rights are property rights that are afforded legal protection. *Empire Lodge Homeowners’ Ass’n v. Moyer*, 39 P.3d 1139, 1146-48 (Colo. 2001); *Santa Fe Trail Ranches Prop. Owners Ass’n v. Simpson*, 990 P.2d 46, 53 (Colo. 1999). Colorado water rights are considered real property. *Dallas Creek Water Company v. Huey*, 933 P.2d 27, 39 (Colo. 1997); *See also* C.R.S. § 38-30-102(2) (conveyance of water rights subject to same formalities as conveyance of real estate). Air Force also treats water rights as real property rights. *See* Air Force Instruction 32-1067, February 4, 2015, Civil Engineering: Water and Fuel

Systems, ¶ 3.3.1. (allocating responsibility for water rights asset management to “real property section”).

23. Defendant was at all times relevant herein, and still is, the federal government, duly organized, and empowered to form federal agencies, such as the United States Air Force.

24. Upon information and belief, the United States acting through its agency, the Air Force, owns Peterson AFB and is now and has been responsible for activities and operations on Peterson AFB. The actions and omissions of the United States asserted herein were made by employees and personnel of the Air Force.

25. Peterson AFB is located in the State of Colorado.

26. Defendant stores and/or stored toxic PFC-based firefighting foam and PFC-contaminated water at Peterson AFB.

27. Defendant uses and/or used PFC-based firefighting foam on Peterson AFB and/or surrounding facilities.

28. Defendant disposes and/or disposed of toxic PFCs into the environment, including by spraying, storing, and placing PFC-containing firefighting foam on land and water at the Base, including a golf course on the Base with PFC-contaminated water, all in violation of mandatory directives.

29. Security, the Venetucci Farm, Peterson AFB, and the Widefield and Windmill Gulch Aquifers are located in the Fountain Creek Watershed area of Colorado, along Fountain Creek. Security, the Venetucci Farm, and the Widefield and Windmill Gulch Aquifers are located downgradient of Peterson AFB.

30. Groundwater from Peterson AFB flows downgradient to the Windmill Gulch and Widefield Aquifers. *See* “Final Site Inspection Report of Aqueous Film Forming Foam Areas at Peterson Air Force Base, El Paso County, Colorado,” July 2017, p. 27 [hereinafter “Final SI”], pp. 9, 12, 15, 18, 25, 27-28; Final Expanded SI Field Sampling Plan, Figure 1.

31. PFCs from Peterson AFB migrated, and are migrating, from disposal sites on Peterson AFB to the Widefield and Windmill Gulch Aquifers and have entered and contaminated Plaintiffs’ real property, water rights, wells, and systems.

32. In May 2016, the United States Environmental Protection Agency, pursuant to the Safe Drinking Water Act, issued separate Drinking Water Health Advisories for two PFC chemicals – perfluorooctanoic acid (“PFOA”) and perfluorooctane sulfonate (“PFOS”). The Health Advisories contained recommended human exposure limits of 70 parts per trillion (ppt) for PFOA and PFOS, both individually and in combination.

33. Because PFOA and PFOS, either individually or combined, in the groundwater at Plaintiffs’ wells exceeded the Health Advisory limits, Plaintiffs shut down their wells in 2016.

34. Security then pursued alternative surface water supplies, installed new pipelines and other infrastructure, and modified existing infrastructure, in order to receive and then deliver to customers the alternative water supplies free of contamination from PFOA and PFOS.

35. Security took, and continues to take, delivery of a substitute supply of water through the Southern Delivery System (“SDS”) pipeline, which runs approximately forty-five (45) miles from Pueblo Reservoir near Pueblo, Colorado, on the Arkansas River, and connects to Security’s water supply system. Security has used the SDS pipeline to take delivery of Security’s water reserves that Security stores in Pueblo Reservoir. Security pays for water, storage, and delivery

of water received through the SDS, and has paid additional fees and costs to take delivery of water through SDS in partial replacement of its contaminated groundwater.

36. Security also began taking additional water through the Fountain Valley Authority (“FVA”) Conduit. Water delivered through the FVA Conduit is delivered to Security from Pueblo Reservoir and consists of either Security’s stored water reserves or water purchased from other entities when available. Security pays for water, storage, and delivery of water received through the FVA Conduit, and has incurred additional fees and costs to take delivery of water through FVA in partial replacement of its contaminated groundwater.

37. Security also has obtained, and continues to obtain, substitute supplies of water delivered through a pipeline connection to the Colorado Springs Utilities (“CS-U”) water system. Water delivered through the CS-U connection is either water from Security’s stored water reserves or is CS-U’s water that Security purchases. Security pays for water, storage, and delivery of water received through CS-U, and has incurred additional fees and costs to take delivery of water from CS-U in partial replacement of its contaminated groundwater.

38. Security cannot rely on the SDS, FVA, or CS-U sources to replace its lost groundwater indefinitely. Use of its own stored reserves reduces Security’s ability to weather a drought. In addition, delivery of additional water to Security through each pipeline depends, to some extent, on other pipeline participants making a share of their capacity available to Security. Additional deliveries also depend on the availability of water to purchase from other water rights owners. At times, that capacity and water might not be available.

39. Security also constructed additional pipelines and system facilities in order to take delivery of these alternative sources and to distribute that water throughout its system.

40. Similarly, in July 2016, the Foundation ceased irrigating its crops due to contamination of its groundwater, and has not grown crops since then.

41. Lease deliveries to Security, Widefield, and Fountain also ceased because those entities terminated use of the contaminated water.

42. Thus, the United States, acting through the Air Force, and their employees and personnel, by its trespass, nuisance, and negligence, proximately caused Plaintiffs' injuries and damages.

BASIS OF CLAIM

PFCs Are Used in Firefighting Foam

43. PFCs are synthetic carbon chain compounds that contain large amounts of the element fluorine. As used in this Complaint, the term "PFCs" includes all PFCs and their derivatives and/or salts that have been or may be detected in or that are threatening Plaintiffs' water supplies and property, including *inter alia*, PFOA, PFOS, PFBA, PFBS, PFHxA, PFHxS, PFPeA, PFHpA, PFNA, PFDA, PFDS, PFUnA, PFDoA, and PFTTrA.

44. PFCs are used in the firefighting foam known as "aqueous film forming foam" ("AFFF").

45. AFFF is water-based and used to extinguish fires that involve petroleum or other flammable liquid because PFCs resist heat, oil, grease, and water.

46. PFCs are not naturally occurring. Thus, the PFCs found in the environment or humans are attributable to human activity.

Defendant's Use, Storage, and Disposal of PFCs from Firefighting Foam at Peterson AFB have Contaminated Plaintiffs' Water Supply

47. Defendant began using PFC-based AFFF at military installations, including Peterson AFB, in 1970 to extinguish fuel-based fires. Final SI, p. 1.

48. AFFF containing PFOS and PFOA, among other PFCs, was used and/or stored at Peterson AFB from approximately 1970 until at least 2018, and Defendant used and stored thousands of gallons of AFFF concentrate at Peterson AFB. *See* Final SI, pp. 3-4.

49. Air Force personnel conducted training exercises at Peterson AFB, including firefighting and explosion training, using AFFF.

50. Defendant disposed of spent AFFF containing PFCs on Peterson AFB. Defendant's disposal of spent AFFF, and its PFC component, has included, but is not limited to, releases and discharges into soil and water pathways that connect the Peterson AFB to Plaintiffs' property, wells, water rights, and systems. U.S. Army Corps of Engineers and Aerostar SES LLC, "Final Expanded Site Inspection Field Sampling Plan, Attachment 1 to Final Uniform Federal Policy (UFP) Quality Assurance Project Plan (QAPP) for Site Inspections of Aqueous Film Forming Foam Areas, Multiple Sites, United Air Force Installations Addendum 8, Field Sampling Plan for Peterson Air Force Base, El Paso County, Colorado," November 2017, p. 2 (hereinafter "Final Expanded SI Field Sampling Plan").

51. For instance, training, exercises, and fire response activities occurred on open ground at Peterson AFB, causing PFC waste to drain into soil, groundwater, surface waters, wetlands, ponds, and ditches.

52. PFC-contaminated runoff from AFFF activities has been captured and stored in golf course ponds and re-used to irrigate the Peterson AFB golf course. Final Expanded SI Field Sampling Plan, p. 3; Final SI, pp. 5-6.

53. Defendant disposed of 10,000 – 20,000 gallons of PFC-contaminated AFFF wastewater into CS-U's sewer system as often as three times a year or more. *See* Final SI, p. 6. Upon

information and belief, PFCs cannot be removed by the CS-U sewage treatment plant and were discharged into Fountain Creek.

54. PFCs discharged to soil, surface waters, wetlands, ponds, and the golf course have migrated into groundwater and contaminated the Widefield and Windmill Gulch Aquifers where Plaintiffs' wells are located, contaminating Plaintiffs' water supply.

Specific Disposal and Storage Locations on Peterson AFB

55. The U.S. Army Corps of Engineers identified numerous specific locations on Peterson AFB where the Air Force used, stored, and/or disposed of the PFCs. These locations include, but are not limited to, A Fire Training Area, former fire training areas including "Site 5" and "Site 8," Hangar 119, Hangar 121, Hangar 133, Hangar 140, Hangar 210, Hangar 214, an underground storage tank, Fire Stations #1 and #2, Pond #3 and its Overflow Pond, a golf course, a former leach field, a former pond and burn pit, Building 104, and off-Base landfills where Defendant disposed of contaminated soil. U.S. Army Corps of Engineers and Aerostar SES LLC, "Revised Final Preliminary Assessment Report for Perfluorinated Compounds at Peterson Air Force Base, El Paso County, Colorado", November 2016, pp. 9, 46-48, [hereinafter "Revised Final PA"].

56. Surface water in the northwest corner of Peterson AFB drains into East Fork Sand Creek, which crosses the Base and then flows into Fountain Creek above Security and the Widefield Aquifer, which is recharged in part from Fountain Creek. Final SI, pp. 28-29, D-1. The current Fire Training Area, Hangar 140, and Hangar 133 are located in the northwest corner of the Base.

57. Drainage from the rest of the Base flows either through surface ditches into the golf course ponds (Ponds #1, #2, and #3), or through the storm water management system into Pond

#3 and/or the Overflow Pond in the southern part of the Base. *Id.* at p. 5. Water in these ponds is used for irrigation. *Id.* at pp. 5-6; Final Expanded SI Field Sampling Plan, p. 3.

58. Water from inside the Hangars is routed through floor drains to an underground storage tank (UST) near Hangar 210, where it is or was discharged into the CS-U public sewer system. Final Revised PA, pp. 19-24. Peterson AFB connected to the CS-U sewer system in or about 1978. Final SI, p. 5. Prior to this connection, any wastewater was discharged into a leach field at Peterson AFB. *Id.*

59. Water that escapes outside the Hangars drains through the storm water management system into Pond #3 and the Overflow Pond or percolates into the soil. *See* Revised Final PA, pp. 19-24.

60. PFC-based AFFF was used in training exercises in the current Fire Training Area from as early as 1989 through as recently as October 2016. Spent PFCs from the Fire Training Area were then stored in a holding tank, which was drained into the CS-U sewer system. Final SI, p. 6.

61. Upon information and belief, CS-U was unaware of, and did not authorize, Defendant's disposals of PFCs into the sewer. *See* Tom Roeder, Air Force: Toxic wastewater sent into Fountain Creek up to three times a year until 2015, The Gazette, <http://gazette.com/air-force-toxic-wastewater-sent-into-fountain-creek-up-to-three-times-a-year-until-2015/article/1588901>.

62. Upon information and belief, PFC-based AFFF was sprayed beyond the perimeter of the Fire Training Area pit in an area where no system of containment existed and where it entered the environment, including soil and groundwater. *See* Final SI, p. 7.

63. PFC-based AFFF was used in training exercises on Site 5, a former fire training area, from as early as 1970 through as recently as 1977. The burn pit at Site 5 that was used for

training exercises did not have a liner to prevent seepage. Upon information and belief, wastewater from training exercises drained into the golf course ponds and has been reused for irrigation or percolated into the surrounding soil and groundwater. *See* Revised Final PA, pp. 11-13.

64. PFC-based AFFF was used in training exercises on Site 8, a former fire training area, from as early as 1977 through as recently as 1992. Upon information and belief, the burn pit at Site 8 that was used for training exercises was not lined. Upon information and belief, wastewater from training exercises drained into the golf course ponds and was reused for irrigation, or percolated into the surrounding soil and groundwater. Final SI, p. 4.

65. PFC-based AFFF was used and/or stored at Hangar 119, an aircraft maintenance hangar, for an unknown number of years. Hangar 119 has a floor drain that drains into the UST near Hangar 210, which drains into the CS-U sewer system. Revised Final PA, p. 19. AFFF was released during testing of the fire suppression system at least twice since 2009. *Id.* at D-3.

66. PFC-based AFFF was used and/or stored at Hangar 121, an aircraft maintenance hangar, at least after 1994, and for an unknown number of years before then. Hangar 121 has a floor drain that drains into the UST near Hangar 210, which drains into the CS-U sewer system. *Id.* at p. 20. AFFF was released during testing of the fire suppression system at least twice since 2009. *Id.* at D-3.

67. PFC-based AFFF was used and/or stored at Hangar 133 at least after 1992, and for an unknown number of years before then. In 2011 or 2012, AFFF was accidentally released into the mechanical room. Hangar 133 has a floor drain that drains into the UST near Hangar 210, which

drains into the CS-U sewer system. *Id.* at p. 21. AFFF was released during testing of the fire suppression system at least twice since 2009. *Id.* at D-3.

68. PFC-based AFFF was used and/or stored at Hangar 140 at least after 2005, and for an unknown number of years before then. Hangar 140 has a floor drain that drains into the UST near Hangar 210, which drains into the CS-U sewer system. *Id.* at p. 22.

69. PFC-based AFFF was used and/or stored at Hangar 210 at least after 1985. There have been four reported accidental releases of AFFF in Hangar 210; the latest incident occurring in 2014. Hangar 210 has a floor drain that drains into the UST near Hangar 210, which drains into the CS-U sewer system. *Id.* at p. 23. AFFF was released during testing of the fire suppression system at least twice since 2009. *Id.* at D-3.

70. PFC-based AFFF was used and/or stored at Hangar 214 at least after 1987. There was one reported accidental release in an unknown year, which may have escaped into a storm sewer, the environment, or a pond. There was another accidental release on October 6, 2015, where AFFF may have escaped into a storm sewer, the environment, or a pond. Hangar 214 has a floor drain that drains into the UST near Hangar 210, which drains into the CS-U sewer system. *Id.* at p. 24. AFFF was released during testing of the fire suppression system at least twice since 2009. *Id.* at D-3.

71. Upon information and belief, a portion of AFFF released in the hangars entered the storm water system, including ponds on the Base.

72. Fire Station #1 is an active fire station. AFFF has been stored in drums and equipment at Fire Station #1. Spray testing using AFFF was conducted at Fire Station #1 for an unknown number of years, including over concrete and a sand-covered volleyball court. Upon information

and belief, there was no liner or other containment beneath the testing areas. Runoff from testing went into the storm water system and then into Pond #3, the Overflow Pond, the other golf course ponds, the CS-U sewer system, East Fork Sand Creek, and/or the environment. *Id.* at pp. 25-26; Final SI, pp. 4-5.

73. Fire Station #2 is an active fire station that opened in 1996. AFFF is stored in drums and equipment at Fire Station #2. Spray testing using AFFF was conducted at Fire Station #2 for an unknown number of years. Runoff from testing drained into surface drainages, Pond #3 and the Overflow Pond, the golf course ponds, and/or the environment. Final Revised PA, pp. 27-28, 42; Final SI, p. 5.

74. Ponds #1, #2, and #3 are detention ponds that have received storm water runoff since at least 1979. Water from Pond #3 is pumped into Ponds #1 and #2. Water in the ponds is reused to irrigate the golf course, and it is not treated prior to reuse. Prior to 2002, Pond #3 did not have a liner to prevent seepage. It is unclear at this time whether Ponds #1 and #2 have liners. Revised Final PA, pp. 28-31; Final SI, pp. 5-6; Final Expanded SI Field Sampling Plan, p. 3.

75. The Overflow Pond is adjacent to Pond #3. It does not have a pond liner to prevent seepage. If Pond #3 is too full, water overflows through “Outfall #4” into the Overflow Pond. Water from all of the Hangars also may flow into the Overflow Pond. There is visible “overflow scarring” at the Overflow Pond, indicating that water has overflowed into it and out from it through “Outfall #5”. *See* Final Revised PA, pp. 29, B-19, D-4; Final SI, p. 6.

76. PFC-contaminated wastewater was discharged to a leach field (at the location of the current golf course) at least from 1970 through 1978. The leach field was designed to be an industrial waste drainage system and consisted of a settling tank, an oil water separator, and a

gravel envelope leach field. PFC-contaminated effluent from the leach field would have entered the subsurface and groundwater. Revised Final PA, pp. 30-31; Final SI, p. 5.

77. In addition, a pond formerly was located near the current location of Pond #3. An unknown amount of AFFF was discharged into that pond. *See* Revised Final PA, pp. 29, 41-42.

78. At Building 104, which is near Pond #3, an unknown amount of AFFF was sprayed into the environment to “irrigate the wildlife.” *Id.* at p. 31, D-5, Figure 3-10.

79. Defendant excavated Site #5 and dumped contaminated soil into Landfill 3. Landfill 3 was excavated and placed into another landfill. The landfills are located between Peterson AFB and Plaintiffs’ well fields. *Id.* at p. 43.

80. Several drums that contained AFFF were washed at an unknown location on Peterson AFB. *Id.* at pp. 10, 43.

81. Until at least 2018, Defendant continued to store at least 150,000 gallons of PFC-contaminated water on Peterson AFB, including in a tank, vehicles, and ponds.

82. As additional information becomes available regarding Defendant’s handling and disposal of PFCs at Peterson AFB, additional locations where AFFF was used, stored, and/or disposed of may be discovered. A Freedom of Information Act Request for additional information and documents was submitted on February 24, 2017, which has not yet been fully processed. Plaintiffs reserve the right to incorporate additional or revised information as it is discovered.

Defendant’s Disposal of PFCs Is Contaminating the Widefield and Windmill Gulch Aquifers

83. Defendant preliminarily identified groundwater, surface water, and soil pathways where PFCs from AFFF used on Peterson AFB is or could be migrating to the Widefield and Windmill

Gulch Aquifers. Defendant analyzed groundwater, surface water, and soil samples from several locations: the current Fire Training Area, former fire training areas “Site 5” and “Site 8,” Fire Stations #1 and #2, Pond #3 and its Overflow Pond, the golf course/former leach field, Building 104, and the off-Base landfills where Defendant disposed of contaminated soil. Final SI, pp. 3-4. Defendant also expanded the investigation and analyzed Pond #1 and areas identified as possible “paleochannels” where PFCs migrate off Peterson AFB. Final Expanded SI Field Sampling Plan, pp. 1-3.

84. At the current Fire Training Area, PFCs were detected in the subsurface soil and groundwater. PFOA and PFOS in groundwater in one sample had a combined concentration of over 88,000 parts per trillion (“ppt”). Final SI, pp. 25-26, 29, 32, 36, A-20. EPA’s health advisories set forth a maximum combined PFOA and PFOS exposure limit of 70 ppt.

85. Defendant concluded that “[u]se of AFFF at the current [Fire Training Area] has resulted in releases of [PFCs] to the environment,” “apparently the result of overspray. . . .” *Id.* at pp. 7, 36. Defendant also concluded that “migration of [PFC]-impacted groundwater offsite is possible and downgradient drinking water wells could be impacted.” *Id.* at p. 32.

86. At Site 5, Pond #3 and its Overflow Pond, the golf course/former leach field, and Building 104, PFCs were detected in the surface soil, subsurface soil, groundwater, sediment from the ponds, and surface water. Combined concentrations of PFOS and PFOA in groundwater exceeded 980 ppt in one sample, and ranged from 79 ppt to 980 ppt. *Id.* at pp. 17-24, 28. Combined concentrations of PFOS and PFOA in the surface water in the ponds reached 826 ppt and 730 ppt. *Id.* at p. 24. Sediment samples from Pond #3 showed a combined concentration of PFOA and PFOS of over 370 micrograms per kilogram (µg/kg). *Id.* at p. 23. Defendant

concluded that “[u]se of AFFF at [Peterson AFB] has resulted in impacts to the environment at [these locations.]. *Id.* at p. 24. Defendant also concluded that “[g]roundwater flows to the southwest ... toward downgradient wells” and PFC-contaminated groundwater “may be flowing off base.” *Id.* at p. 28.

87. At Site 8, PFCs were detected in the surface soil, subsurface soil, and groundwater. *Id.* at pp. 9-11, 28.

88. At Fire Station #1, PFCs were detected in surface soil, subsurface soil, and groundwater. Combined concentrations of PFOA and PFOS in groundwater at Fire Station #1 ranged from 77 ppt to 178 ppt. *Id.* at pp. 11–14. Defendant concluded that “spray testing at Fire Station #1 has resulted in releases of [PFCs] to the environment.” *Id.* at p. 14. Defendant also concluded that “[g]roundwater flows to the southwest at Fire Station #1 and impacted groundwater may be flowing off base.” *Id.* at p. 35.

89. At Fire Station #2, PFCs were detected in surface soil, subsurface soil, and groundwater. A soil sample contained PFOS at 2,400 µg/kg. *Id.* at pp. 14-17, 29. Defendant concluded that this PFOS detection in the soil “indicates the potential for possible impacts to groundwater,” *Id.* at pp. 27-28, and “surface soil could impact groundwater at concentrations above the EPA [Health Advisory] creating a potential human exposure pathway.” *Id.* at p. 31.

90. Defendant has not yet analyzed the extent of PFC contamination at numerous other locations where AFFF was used and escaped into the environment, including, but not limited to, Hangar 119, Hangar 121, Hangar 133, Hangar 140, Hangar 210, and Hangar 214, and other areas along the surface and groundwater pathways from Peterson AFB to the Widefield and Windmill Gulch Aquifers. Defendant is conducting additional aquifer investigation work. Plaintiffs reserve

the right to incorporate additional information regarding PFC contamination in soil and water as it is discovered.

Specific and Mandatory Directives Prohibited Defendant's Actions

91. Defendant's discharges of PFCs violated mandatory laws, regulations, policies, and instructions, including a mandatory Executive Order and mandatory USAF Instructions.

92. Air Force Instruction 32-1067, February 4, 2015, Civil Engineering: Water and Fuel Systems ("AFI 32-1067") contains mandatory instructions on how to handle wastewater and PFCs. (This Instruction superseded Air Force Instructions 32-1067 (Water Systems, April 3, 2013), 32-1066 (Plumbing Systems, October 17, 2007), 32-7041 (Water Quality Compliance, December 10, 2003), and 32-1069 (Gas Supply and Distribution, March 31, 1994)). Upon information and belief, AFI 32-1067 became effective on February 4, 2015 and currently remains in effect.

93. AFI 32-1067 includes the following requirements:

- a) "Collect and manage industrial wastewater (e.g., wastewater discharge from aircraft hangar accidental release of fire fighting foam solution) as a hazardous waste per AFI 32-7042, *Waste Management*, if regulations or permit limits prohibit discharging such wastewater into domestic or other non-industrial sewer systems. . . .

Unless permitted, do not discharge substances to sanitary or storm systems that contain perfluorinated compounds (PFCs) like perfluorooctane sulfonic acid (PFOS), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), perfluorohexane sulfonic acid (PFHxS), perfluoroheptanoic acid (PFHpA), or perfluorobutanesulfonic acid (PFBS). PFC-containing firefighting foams will not be discharged to a POTW [Publicly

Owned Treatment Works] or FOTW. Release of firefighting solutions that contain PFCs from fire systems test activation and fire vehicle chemical discharges will be captured, contained, and disposed of to meet applicable regulatory requirements or applicable policy directives.” ¶¶ 4.3.2. and 4.3.2.1.

- b) “Firefighting solutions that do not contain PFCs may be discharged to the sanitary sewer after receiving approval from the receiving POTW or FOTW.” ¶ 4.3.2.2.

- c) “NPDES Permits. For installations located in the U.S., discharges of domestic wastewater require an NPDES permit from Federal or delegated state regulatory authorities. . . .

Discharges to POTW Treatment Facilities. Installations that discharge to POTW are considered as indirect dischargers and are regulated by the POTW authority. Installations must comply with applicable POTW regulations, permits, and contractual agreements.”

¶¶ 4.3.8. and 4.3.8.4.

- d) “Accidental Releases of Fire Fighting Foam Solutions. Unless permitted, do not discharge substances that contain pentadecafluorooctanoic acid, perfluorooctanoic acid, perfluorocaprylic acid or perfluorooctanoate (PFOA) or perfluorooctanyl sulfonate, perfluoronoanoic acid (PFOS) [sic]. Release of firefighting solutions from fire systems test activation and fire vehicle chemical discharges will be captured, contained and disposed to meet applicable regulatory requirements. Prior to discharge to the sanitary sewer; obtain approval of the receiving POTW or FOTW. If metered firefighting foam release to the sanitary sewer is not approved, then containerize and dispose following regulatory standards. Firefighting foam of all types will not be released to storm water conveyance structures.” ¶ 5.6.

94. Upon information and belief, from February 4, 2015 into at least 2018, Defendant failed to capture or contain or treat firefighting foam containing PFCs, including PFOA and PFOS.

95. Pursuant to the Federal Resource Conservation and Recovery Act, hazardous waste is subject to strict requirements for containment, storage, treatment and disposal. 42 U.S.C. § 6921, et seq.; 40 C.F.R. § 260, et seq.; C.R.S. § 25-15-308; 6 CCR 1007-3, Parts 260-279.

96. As described above, PFCs were not captured, contained and disposed of as hazardous waste, but intentionally were released and disposed of at numerous unpermitted locations at Peterson AFB, including Fire Stations #1 and #2, Hangar 119, Hangar 121, Hangar 133, Hangar 140, Hangar 210, Hangar 214, Fire Stations #1 and #2, Pond #3, the Overflow Pond, and the golf course.

97. Air Force Instruction 32-7041, Civil Engineering: Water Quality Compliance, December 10, 2003 (effective through February 4, 2015) (“AFI 32-7041”) contains mandatory instructions on wastewater discharges, including the following:

- a) “Discharges to Publicly Owned Treatment Works (POTWs) Installations that discharge to permitted POTWs are considered as secondary dischargers and are regulated by the POTW authority. They must comply with applicable POTW regulations, permits, and contractual agreements.” ¶ 2.2.3.2.
- b) “Strictly control the discharge of industrial wastewater and other prohibited waste from entering into domestic wastewater or other non-industrial sewer systems and storm sewer systems. . . . Unauthorized discharges of certain types of industrial wastewaters through drains to domestic wastewater collection systems are prohibited. For discharges to POTWs, contact the facility manager for clarification. . . . Pretreat regulated industrial

wastewater to acceptable levels before discharge to a domestic wastewater or other non-industrial sewer systems. Pretreat other industrial wastewater, such as toxic, flammable, and corrosive wastes to remove these characteristics before discharge into a domestic wastewater system. . . . Collect and manage industrial wastewater as a hazardous waste per AFI 32-7042, *Solid and Hazardous Waste Compliance*, if regulations prohibit discharging such wastewater into domestic wastewater or other non-industrial sewer systems and pretreatment is not practical.” ¶¶ 2.9., 2.9.1., 2.9.3., and 2.9.4.

- c) Industrial wastewater is defined as “wastewater from industrial activities.” Page 20. This Instruction acknowledges that “The Environmental Protection Agency defines 11 categories of industrial activities, some of which may apply to Air Force installations, including: (1) Air and ground transportation facilities. . . .” Page 22.

98. Upon information and belief, from December 10, 2003 through February 4, 2015, Defendant failed to comply with the mandatory obligations of AFI 32-7041. AFFF waste should have been treated as industrial wastewater because it was waste from Peterson AFB, an air and ground transportation facility.

99. Defendant did not collect and manage PFCs as hazardous wastes. Instead, PFCs were disposed of into the environment, including into soil, surface water and groundwater.

100. Air Force Instruction 32-7041, Civil Engineering: Water Quality Compliance, May 13, 1994 (effective through December 10, 2003) (“AFI 32-7041”) contains the following mandatory instructions:

- a) “Industrial Wastewater. . . . Pretreat other industrial wastewater, such as toxic and corrosive wastes, before discharging it into a domestic wastewater system. . . . Strictly

control the discharge of industrial wastewater by: . . . Keeping prohibited waste from entering domestic wastewater and other nonindustrial sewer systems; Pretreating regulated industrial wastewater to acceptable levels before discharge to a domestic wastewater or other nonindustrial sewer systems. . . . Collect and manage industrial wastewater as a hazardous waste per AFI 32-7042, *Solid and Hazardous Waste Compliance*, if: Regulations forbid discharging such wastewater into domestic wastewater or other nonindustrial sewer systems; Pretreatment is impossible.” ¶¶ 2.8.–2.8.3.

- b) “Fire Training Facilities. Operate new fire training facilities as zero-discharge facilities. New facilities must: Protect groundwater; Include a groundwater monitoring system and double-lined basins with leak-detection systems.” ¶¶ 2.9.–2.9.1.

101. Upon information and belief, from May 13, 1994, through December 10, 2003, Defendant failed to comply with AFI 32-7041. AFFF waste should have been treated as industrial wastewater. As industrial wastewater, USAF should have pretreated PFC-containing AFFF before discharge into the CS-U sewer system, or should have collected and managed the AFFF as a hazardous waste.

102. Defendant disposed of AFFF containing PFCs into the environment, including into soil, surface water, and groundwater. PFC-contaminated water also was reused for golf course irrigation on Peterson AFB, without treatment. Thus, the Air Force failed to either pretreat and deliver AFFF waste to a POTW pursuant to authorization or to manage the AFFF as hazardous waste.

103. In addition, upon information and belief, Defendant failed to operate new fire training facilities as zero-discharge facilities with groundwater monitoring systems and double-lined basins having leak-detection systems.

104. Air Force Instruction 32-1067, Civil Engineering: Water Systems, March 25, 1994 (effective through April 3, 2013) (“AFI 32-1067”) contains the following mandatory instructions:

- a) “Pollution Control: Operate and maintain water pollution control facilities according to AFM 91-32 and plant-specific O&M manuals which are required for each major facility. . . . Activities that require special attention include . . . fire training.” ¶ 7.3.1.
- b) “A base standard wastewater treatment procedure is required to govern the discharge of industrial and nondomestic waste to the sanitary system by generating activities. Base Civil Engineering outlines procedures for discharging industrial wastes to the sanitary system and generators must follow these instructions. Instructions should describe pretreatment requirements, discharge procedures, and limitations for industrial waste. . . . Generators must use pollution control techniques in AFI 32-7080, *Pollution Prevention Programs* (formerly AFR 19-15), to minimize pollutant discharges. Hazardous waste may not be discharged to the collection system.” ¶ 7.3.2.

105. Upon information and belief, from March 25, 1994, through April 3, 2013, Defendant failed to comply with AFI 32-1067 by failing to have a base standard wastewater treatment procedure for PFC-containing AFFF and by failing to handle PFCs as hazardous waste.

106. Air Force Instruction 32-7042, Civil Engineering: Waste Management, November 7, 2014, revised February 8, 2017 (“AFI 32-7042”), contains the following mandatory instruction:

- a) “Inherent in the mission of the AF are the associated environmental responsibilities of protecting human health and the environment and ably managing the natural resources whose care has been entrusted to the AF. . . . Where environmentally damaging materials are used, their use is minimized. If the use of such materials cannot be avoided, the spent material or waste is reused or recycled whenever feasible. As a last resort, spent material or waste that cannot be reused or recycled is disposed of in an environmentally safe manner, consistent with the requirements of all applicable laws.” ¶ 1.1.

107. Executive Order 11507, Prevention, Control, and Abatement of Air and Water Pollution at Federal Facilities, February 4, 1970 (effective through December 17, 1973) (“EO 11507”) required federal agencies to:

ensure that all facilities under their jurisdiction are designed, operated, and maintained so as to meet the following requirements:
 No waste shall be disposed of or discharged in such a manner as could result in the pollution of ground water which would endanger the health or welfare of the public.

§ 4.a.5. Upon information and belief, from 1970 to 1973 and from 2014 to 2018, Defendant disposed of PFC waste on Peterson AFB in violation of AFI 32-7042 (Rev. 2017) and EO 11507, by discharging AFFF containing PFCs to soil, surface water, and groundwater which resulted in groundwater pollution that endangers the health and welfare of the public.

108. Despite a FOIA Request, Air Force Instruction 32-1067, Civil Engineering: Water Systems, April 3, 2013, has not been made available to Security. Upon information and belief, this April 3, 2013 Instruction contains mandatory rules and directives that became effective on April 3, 2013, that remained in effect through February 4, 2015, and that are substantially similar to the May 13, 1994 and February 4, 2015 versions of AFI 32-1067. Pending discovery,

Plaintiffs allege the same facts and allegations as it did for the May 13, 1994 and February 4, 2015 versions of AFI 32-1067.

109. Despite a FOIA Request, the following instructions also have not been made available to Security: AFR 91-9, December 1, 1989 and AFR 91-10, January 2, 1990. Upon information and belief, these instructions are predecessors of AFI 32-1067 and contain similar instructions.

Pending discovery, Plaintiffs allege the same facts and allegations as it did for the May 13, 1994 and February 4, 2015 versions of AFI 32-1067.

110. Despite a FOIA Request, no instructions, manuals, or other mandatory directives that are specific to Peterson AFB have been made available to Security.

111. As additional information becomes available regarding Defendant's handling and disposal of PFCs at Peterson AFB, additional instructions, rules, manuals, and directives may be implicated that are not specifically identified or cited in this Complaint. Plaintiffs reserve the right to incorporate additional rules, manuals, instructions, directives, or the like, as additional information is discovered.

Defendant's Actions Were Not Grounded in Policy

112. Defendant's disposal of PFCs were not based on considerations of public policy, including social, economic, or political policy.

113. The foregoing directives forbid discharges of PFCs to the environment and establish requirements for handling these wastes. They granted no authority to balance social, economic, or political concerns and none exist. Moreover, the prohibitions on discharges to the environment are absolute and require no balancing of factors. Thus, none of Defendant's actions were protected policy determinations.

114. There was and is no policy benefit from handling and disposing of AFFF containing PFCs in violation of mandatory directives, for contaminating groundwater with PFCs, or contaminating Plaintiffs' water supply, which provided drinking water to approximately 19,000 people.

115. There is no policy benefit from trespassing on Plaintiffs' land and water rights, acting negligently, and creating a nuisance through releases of PFCs into Plaintiffs' water supply.

116. Properly handling, disposing of, and/or treating PFCs posed and poses no threat to national security or Peterson AFB; and, in fact, was and is expressly required by the directives, discussed above.

Defendant's Disposal of PFCs Contaminating the Widefield Aquifer

117. The Widefield and Windmill Gulch Aquifers and the Fountain Creek Watershed are contaminated with numerous types of PFCs. The Colorado Department of Public Health and Environment (CDPHE), the agency tasked with regulation of water quality in Colorado, reports that these include PFOS, PFOA, PFBS, PFHpA, PFHxS, and PFNA.

118. Plaintiffs have discovered PFOS, PFOA, and other PFCs in samples of groundwater collected from all of their wells.

119. For example, levels of PFOA, PFOS, and PFHxS have been detected in water withdrawn from Plaintiffs' wells at the concentrations shown in Table 1, below.

Table 1

Well	Date	PFHxS (ppt)	PFOA (ppt)	PFOS (ppt)
CS13	1/25/2016	440	90	150
FV4	2014 average	180	50	60

Well	Date	PFHxS (ppt)	PFOA (ppt)	PFOS (ppt)
R1	2014 average	315	40	45
R2	2014 average	335	60	55
S2	2014 average	210	50	40
S4	2014 average	125	30	95
S7	2014 average	135	30	90
S8	2014 average	90	20	40
S9	2014 average	195	45	75
S10	2014 average	135	40	90
S11	2014 average	95	30	95
S12	1/25/2016	140	30	100
S13	1/25/2016	400	90	160
S14	1/25/2016	640	60	510
S15	2014 average	260	65	20
S16	2014 average	360	65	55
Tank for Wells V4, V5, V7, V8	2014 average	370	70	60
Yucatan Tank Pump Station Blend	2014 average	75	7.5	40
W8	2014 average	330	80	580
W9	2014 average	325	75	975
W12	2014 average	240	45	595
Water Treatment Plant TP042	2014 average	515	85	175

120. In May 2016, the EPA issued health advisory exposure limits of 70 ppt for PFOA and PFOS, either alone or combined. Most of the samples listed in Table 1 exceeded 70 ppt for PFOA, PFOS, or a combination of both.

121. Upon information and belief, soil, plants, and animals in the Fountain Creek Watershed and in Security's service area also contain PFCs due to the contaminated groundwater.

PFCs, including PFOA and PFOS, Threaten Human Health

122. Humans may absorb PFCs from drinking water, and PFCs accumulate primarily in the blood stream, kidneys, and liver.

123. PFCs are extremely persistent and bioaccumulate, or build up, in the human body. Even a short-term exposure results in a body burden that persists for years and can increase with additional exposures later.

124. The EPA projects that PFOS has a half-life of 5.4 years, PFOA has a half-life of 2.3 – 3.8 years, and PFHxS has a half-life of 8.5 years, in humans. (A half-life is the amount of time it takes for fifty percent of the contaminant to leave the body.) Because of these long half-lives, the EPA expects that “it can reasonably be anticipated that continued exposure could increase body burdens to levels that would result in adverse outcomes.” EPA, Long-Chain Perfluorinated Chemicals (PFCs) Action Plan, pp. 1, 8-9, December 30, 2009.

125. The EPA Health Advisories have identified a number of health risks associated with exposure to PFCs. Studies show associations between increased PFOA and PFOS levels in blood and an increased risk of several health effects, including high cholesterol levels, changes in

thyroid hormone, ulcerative colitis (autoimmune disease), pre-eclampsia (a complication of pregnancy that includes high blood pressure), and kidney and testicular cancer.

126. In May 2016, the EPA issued its Health Advisories for PFOA and PFOS. The Health Advisories recommend a concentration limit of no greater than 70 parts per trillion (ppt) of PFOA, PFOS, or a combination of both in drinking water. EPA Health Advisories reflect the EPA's assessment of the best available peer-reviewed science. EPA, Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA), p. 9, May 2016; EPA, Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS), p. 10, May 2016.

127. For PFOA, the EPA concluded in the May 2016 Health Advisory that human studies collectively support the conclusion that PFOA exposure is a hazard. The 70 ppt PFOA advisory limit is intended to prevent a variety of adverse developmental effects to fetuses during pregnancy and to infants during breast feeding. Human studies have shown that PFOA is transferred from mother to infant via cord blood and breast milk. The 70 ppt PFOA advisory limit also is intended to prevent adverse health effects in the adult general population, including but not limited to testicular and kidney cancer, liver damage, and immune effects.

128. For PFOS, the EPA concluded in the May 2016 Health Advisory that the 70 ppt PFOS advisory limit is intended to prevent a variety of adverse developmental effects to fetuses during pregnancy and to infants during breast feeding. Human studies have shown that PFOS is transferred from mother to infant via cord blood and breast milk. The 70 ppt PFOS advisory limit also is protective of adverse health effects in the adult general population, including but not limited to liver damage, other developmental effects, and developmental neurotoxicity.

129. The EPA also classified PFOA and PFOS as having suggestive evidence of carcinogenic potential in humans. EPA, Health Effects Support Document for Perfluorooctanoic Acid (PFOA), p. 3-159, May 2016; EPA, Health Effects Support Document for Perfluorooctane Sulfonate (PFOS), p. 3-114, May 2016.

130. The EPA cited reports from the Organization for Economic Co-operation and Development (“OECD”) in the May 2016 Health Advisories. The OECD is an international intergovernmental organization that meets, discusses issues of concern, and works to respond to international problems.

131. According to a published OECD Report, for mammalian species, PFOA and its salts have been found to cause cancer in rats and adverse effects on the immune system in mice. In addition, PFOA and its salts can display reproductive or developmental toxicity in rodents at moderate levels of exposure, and moderate to high systemic toxicity in rodents and monkeys following long-term exposure by the oral route. OECD, Report of an OECD Workshop on Perfluorocarboxylic Acids (PFCAs) and Precursors, p. 21, June 18, 2007. The OECD also concluded in a Hazard Assessment that PFOS is persistent, bioaccumulative and toxic to mammalian species. OECD, Hazard Assessment of Perfluorooctane Sulfonate (PFOS) and Its Salts, p. 5, November 21, 2002.

132. The EPA also cited findings from a C8 Science Panel and Health Project in the May 2016 Health Advisory for PFOA. The C8 Science Panel was formed out of a class action settlement related to PFOA contamination of groundwater from a manufacturing facility in West Virginia. The C8 Health Project is the largest study evaluating human exposure and health endpoints for PFOA; the study included more than 65,000 people in Mid-Ohio Valley communities who were

exposed to PFOA for longer than 1 year. The C8 Science Panel consisted of three epidemiologists and its goal was to assess the links between PFOA and a number of diseases. The C8 Science Panel carried out a series of exposure and health studies between 2005 and 2013; information was gathered through questionnaires and blood samples from the individuals who had drinking water that was contaminated with PFOA and previously published studies were also reviewed as part of the project.

133. The C8 Science Panel released reports and found probable links between exposure to PFOA and six diseases: high cholesterol, ulcerative colitis, thyroid disease, testicular cancer, kidney cancer, and pregnancy-induced hypertension.

134. In addition, CDPHE advises on its website that “[r]ecent information has strengthened the link between exposure to PFOA and PFOS and developmental effects including low birth weight and accelerated puberty. Low birth weight can contribute to many long-term health and behavioral risks, including diabetes and obesity. Some human studies show that increased exposure to PFOA and PFOS might increase the risk for certain health problems such as changes in blood cholesterol, liver enzymes, and uric acid levels, which may be linked with an elevated risk of heart disease, liver disease or high blood pressure.” CDPHE, PFCs – Health Recommendations.

135. CDPHE believes that PFHpA has the potential to have similar effects to PFOA and PFOS. CDPHE, EPA Health Advisory, <https://www.colorado.gov/pacific/cdphe/PFCs/health>.

136. If PFOA and PFOS levels exceed the Health Advisory levels, CDPHE states that “actions [should be initiated] to protect humans from coming in contact with the substance.” CDPHE, PFCs – Health Recommendations, <https://www.colorado.gov/pacific/cdphe/PFCs/health>.

137. The Colorado Solid and Hazardous Waste Commission (“Commission”) added PFOA and PFOS and their anions to Colorado’s list of hazardous constituents in 6 CCR 1007-3, Part 261, Appendix VIII. The Colorado Hazardous Waste Regulations allow substances to be added to the list of hazardous constituents if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic or teratogenic effects on humans or other life forms. The Commission found that PFOS and PFOA have been shown in scientific studies to be toxic and potentially carcinogenic to humans, satisfying the regulatory criteria for listing.

138. In April 2018, the Colorado Water Quality Control Commission promulgated regulatory groundwater standards of 70 ppt for PFOS and PFOA combined for the area in which Plaintiffs’ wells are located. 5 CCR 1002-42, 21 § 42.7(7).

139. Upon information and belief, the PFCs with carbon chains longer than that of PFOA and PFOS (i.e., longer than eight) are even more dangerous to human health. OECD, Report of an OECD Workshop on Perfluorocarboxylic Acids (PFCAs) and Precursors, p. 21, June 18, 2007. PFNA, which contains a carbon chain longer than PFOA and PFOS has been found in some sampling of the Widefield and Windmill Gulch Aquifers.

140. To date, no known studies and assessments of risks associated with PFCs have taken into account any additive and synergistic toxic effects of mixtures of these compounds. To date, mixtures of at least PFOA, PFOS, PFNA, PFBS, PFHxS, and PFHpA have been found in sampling of the Widefield and Windmill Gulch Aquifers.

141. Notwithstanding the foregoing actions and determinations by EPA and CDPHE, neither PFAS nor PFOA, nor other PFCs, have been listed as, or otherwise determined to be, hazardous waste regulated by the Resource Conservation and Recovery Act. Thus, the mandatory directives

requiring Air Force to treat AFFF containing PFC as hazardous waste are internal requirements, not RCRA compliance obligations.

142. Upon information and belief, Defendant knew or should reasonably have known about the health effects from PFCs, discussed above, at the time they used PFC-based AFFF.

PFCs, including PFOA and PFOS, Threaten the Environment

143. PFCs are extremely persistent in the environment because they are chemically and biologically stable and are resistant to environmental degradation. The EPA projects that PFOS has a half-life in water of over 41 years, and PFOA has a half-life in water of over 92 years. And, “PFOA and PFOS are considered to be resistant to degradation in soil.” EPA, Long-Chain Perfluorinated Chemicals (PFCs) Action Plan, p. 1, December 30, 2009.

144. PFCs also are particularly mobile in soil and water, readily absorbed into groundwater, and can migrate across long distances.

145. Additionally, non-human receptors exposed to the contaminated environment are at significant risk of harm. PFOA is persistent and can cause adverse effects in laboratory animals, including cancer and developmental and systemic toxicity. PFOS is persistent, bioaccumulative and toxic to mammalian species. PFOS is linked to developmental, reproductive, and systemic toxicity. PFOA and PFOS are also linked to:

- (a) immune system impacts on certain animal species (which are often used as indicators of the overall health of an ecosystem);
- (b) elevated mortality in unexposed progeny of freshwater macro-invertebrates with exposure in the parental generation;
- (c) disruption of the endocrine system in wildlife; and

(d) liver toxicity in animals.

146. PFOA also is readily taken up by plants, including wild plants as well as crops grown on contaminated soil, and bioaccumulates in the food chain.

147. These impacts impair use of Plaintiffs' Widefield and Windmill Gulch Aquifer water rights for irrigation of food crops or other uses that could expose humans and animals to PFCs.

148. Further, since PFOA and PFOS are not the only PFCs in the environment, mixtures of PFCs raise the likelihood of additive and synergistic impacts on non-human receptors. It is likely that one or more other PFCs possess similar characteristics and pose similar threats of adverse health effects as set forth above for PFOA and PFOS.

149. Upon information and belief, Defendant knew or should reasonably have known about the environmental effects from PFCs, discussed above, at the time they used PFC-based AFFF.

The Threats from PFCs are Ongoing

150. The PFC contamination caused by Defendant is not contained and continues to spread into Plaintiffs' property and groundwater supplies.

151. If the Widefield and Windmill Gulch Aquifers and the contaminated soil are not remediated, PFC contamination will continue to impact Plaintiffs' property and water rights far into the future because PFCs resist degradation and are persistent and mobile in water and soil.

Plaintiffs' Have Been Damaged by Defendant's Disposal of PFCs

152. The PFC contamination prevents Plaintiffs from fully utilizing their property, including their water rights and wells in the Widefield and Windmill Gulch Aquifers.

153. Due to the PFC contamination, Security stopped using its wells in 2016 and cannot currently utilize its groundwater and other property rights. Security has the right to use in excess

of 840 million gallons of water per year (approximately 2,583 acre-feet per year) from the Widefield and Windmill Gulch Aquifers. This groundwater historically provided about half of Security's total water supply requirements.

154. Due to PFC contamination of its groundwater, Security spent in excess of \$6 million from 2016 to the present to purchase and transport alternate and supplemental sources of water through the FVA conduit, SDS pipeline, and CS-U connection, to shut down its wells in the Widefield and Windmill Gulch Aquifers, to construct the CS-U connection, to construct alternate internal water delivery configurations so that water from the surface water supplies from the three pipelines could be distributed to Security's customers, to monitor and sample for PFCs, to repair reputational damage, and to otherwise respond to the PFCs contamination.

155. PFCs are damaging, and will continue to damage, Security's water and property because they will persist for decades in water and soil and are bioaccumulating in plants and organisms.

156. Security has entered into agreements with the Air Force addressing future deliveries of alternative water supplies and removal of PFCs from groundwater so that it can be used again in Security's system. Therefore, at this time, Security seeks to recover only damages it sustained prior to commitment of Air Force payments for ongoing costs and to recover future costs of operating and maintaining a filtration system. However, Security may claim additional damages if Air Force does not continue to pay for the ongoing increased costs of operation and to provide for removal of PFCs from groundwater.

157. The PFC contamination prevents the Foundation from fully utilizing its property, including its water rights and wells in the Widefield Aquifer. As a result of Defendant's contamination of this water and farm land, the Foundation has suffered and will suffer damages.

158. Due to the PFC contamination, the Foundation cannot currently utilize its water and property rights for growing produce and vegetables or leasing water to municipalities. The Foundation has the right to use in excess of 162 million gallons of water per year (500 acre-feet per year) from the Widefield Aquifer for crop irrigation, and to lease in excess of 366 million gallons of water per year to municipalities, including Security. Under the current lease, the Foundation leases 1,350 acre-feet of water per year to Security and Widefield in perpetuity, who sublease a portion of the water rights to the City of Fountain. Those leased water rights have not been able to be used for municipal purposes due to the PFC contamination caused by Defendant. Moreover, Security and Widefield may remain liable for the lease payments even if the contaminated water is filtered to remove PFC.

159. The Foundation's water and property rights have been impaired and devalued by the PFC contamination. Due to PFC contamination of its groundwater, the Foundation has lost, and reasonably anticipates losing, in excess of \$7,000,000, including lost rents and crops, repair of reputational damage, and costs to mitigate and treat the PFC contamination.

160. PFCs are damaging and will continue to damage the Foundation's water and property because they will persist for decades in water and soil, and are bioaccumulating in plants and organisms.

FTCA CLAIMS

FTCA Statutory Background

161. Under the FTCA, the government is liable "in the same manner and to the same extent as a private individual under like circumstances," 28 U.S.C. § 2674, "in accordance with the law of the place where the act or omission occurred," 28 U.S.C. § 1346(b)(1). Courts resolve questions

of liability under the FTCA in accordance with the law of the state where the tortious activity took place. *Hoery v. United States*, 324 F.3d 1220, 1222 (10th Cir. 2003).

FIRST CLAIM FOR RELIEF

Trespass

162. Plaintiffs incorporate all averments in this Complaint as if restated fully herein.

163. Defendant has trespassed, and continues to trespass, on Plaintiffs' property, including Plaintiffs' water rights, by contaminating Plaintiffs' property with persistent, toxic, and bioaccumulative PFCs.

164. In Colorado, a defendant is liable for trespass when the defendant permits "a physical intrusion upon the property of another without the proper permission from the person legally entitled to possession of that property." *Hoery v. United States*, 64 P.3d 214, 217 (Colo. 2003). "The intrusion can occur when an actor . . . causes something else to enter" the property, including land and groundwater. *Id.*; *Antolovich v. Brown Grp. Retail, Inc.*, 183 P.3d 582, 602 (Colo. App. 2007) (plaintiffs alleged that defendant caused pollutant to enter plaintiffs' soil and groundwater); *see also* CJI-Civ 4th, Civil 18:1 and 18:2. Trespass may be a permanent or continuing tort. For continuing trespass, the claim continues to accrue as long as tortious conduct continues. *Hoery*, 324 F.3d at 1222.

165. Defendant intentionally sprayed, dumped, discharged, or disposed of AFFF containing PFCs on open ground, soil, and water at Peterson AFB; "irrigate[d] the wildlife" and the Peterson AFB golf course with water containing PFCs; spilled PFCs; stored PFC-contaminated water in ponds, containers, and vehicles on Peterson AFB where it leaked and leached into the environment; and otherwise discharged PFCs into the environment.

166. PFCs from Peterson AFB migrated from Peterson AFB through groundwater to the Widefield and Windmill Gulch Aquifers and property owned by Plaintiffs, including the property on which their wells are, or could be, located and into the groundwater for which they possess decreed water rights.

167. Defendant's intentional disposal of PFC waste has caused a trespass on Plaintiffs' property and water rights.

168. The continued migration to, and existence of, PFCs beneath Plaintiffs' property and in Plaintiffs' water rights in the Widefield and Windmill Gulch Aquifers, constitute a continuing trespass.

169. Defendant holds no right to possess Plaintiffs' property and water rights.

170. Defendant did not have Plaintiffs' permission to place PFCs upon, in, or beneath Plaintiffs' property, including the lands where Plaintiffs' wells are, or could be, located and the water rights owned by Plaintiffs.

171. Upon information and belief, Defendant knew, or should have known, and knows that PFCs migrated or would migrate downgradient into the Widefield and Windmill Gulch Aquifers, and into Plaintiffs' real property and water rights.

172. Defendant intentionally and unreasonably failed to remediate or stop the PFC contamination from spreading to the Plaintiffs' property and water supplies.

173. The intrusion into Plaintiffs' property and water rights of PFCs caused Security to suffer in excess of \$6 million in damages, including the costs of obtaining, providing, and delivering alternate water supplies and delivery systems; costs of sampling and monitoring; and other

response or remediation costs. Security expects to incur in excess of an additional \$8.5 million in future liabilities and restoration costs in order to remove PFCs from its groundwater.

174. The intrusion into the Foundation's property and water rights of PFCs caused, and is reasonably anticipated to cause, the Foundation to suffer in excess of \$7 million in damages, including loss of rents and revenue; loss of crops; loss of an ability to carry on an economic enterprise on and with its property; cost of treating its water in order to beneficially use it; and other response or remediation costs.

175. As a direct and proximate result of the trespass by the United States, Plaintiff's water rights and property are being damaged and destroyed, causing economic loss.

SECOND CLAIM FOR RELIEF

Nuisance

176. Plaintiffs incorporate all averments in this Complaint as if restated fully herein.

177. Defendant created and continues to cause a nuisance to Plaintiffs by unreasonably and substantially interfering with Plaintiffs' use and enjoyment of their property and water rights by contaminating them with PFCs.

178. In Colorado, a defendant is liable for nuisance when it creates a substantial invasion of a plaintiff's interest in the use and enjoyment of its property. *Hoery*, 64 P.3d at 218. The invasion may be intentional and unreasonable. To be unreasonable, an interference must be significant enough that a normal person in the community would find it offensive, annoying, or inconvenient. *Pub. Serv. Co. of Colorado v. Van Wyk*, 27 P.3d 377, 391 (Colo. 2001). The invasion also may be unintentional and negligent or reckless. *Id.* Conduct constituting a nuisance can include indirect or physical conditions created by the defendant that cause harm. *Hoery*, 64

P.3d at 218. Nuisance may be a permanent or continuing tort. For continuing nuisance, the claim continues to accrue as long as tortious conduct continues. *Id.*

179. Defendant substantially invaded Plaintiffs' interests in the use and enjoyment of their property and water rights, because Defendant directly and proximately caused and is causing the contamination of Plaintiffs' property and water rights, with extremely persistent, toxic, and bioaccumulative PFCs.

180. Defendant permitted and is permitting PFCs to spread beyond Peterson AFB, travel through the Fountain Creek Watershed, and invade Plaintiffs' property and water rights.

181. The PFC contamination from Defendant's actions have contaminated Plaintiffs' water supplies, which they rely on for municipal, including drinking water, and agricultural irrigation uses. Due to the contamination, Plaintiffs no longer can use the water.

182. Defendant's interference is intentional and unreasonable. Defendant intentionally and unreasonably discharged PFC-contaminated wastewater by spraying and dumping PFCs on open ground, soil, and water at Peterson AFB, irrigating its golf course and wildlife with PFC-contaminated water, storing PFC-contaminated water in unlined ponds where it leaked into soil and groundwater, failing to contain and handle PFC-contaminated wastewater as hazardous waste, and discharging PFC-contaminated wastewater.

183. Defendant's intentional discharges were made knowing that the discharges would contaminate groundwater and result in PFCs migrating to Plaintiffs' properties and water rights, and continued after Defendant knew the discharges had interfered with the use of Plaintiffs' properties.

184. In the alternative, Defendant's interferences are negligent because Defendant should have reasonably foreseen that its discharges of AFFF would contaminate groundwater, and Plaintiffs' properties and water rights, with PFCs.

185. The continued migration to, and existence of, PFCs beneath Plaintiffs' property and in its decreed groundwater supplies as a result of Defendant's actions and omissions, have compelled Plaintiffs to forego use of their valuable groundwater rights, which is offensive, annoying, and inconvenient, and constitutes a continuing nuisance.

186. The intrusion of PFCs into Security's property and water rights caused Security to suffer in excess of \$6 million in damages in the costs of securing and delivering alternate water supplies; costs of sampling and monitoring; and other response or remediation costs. Security expects to incur in excess of an additional \$8.5 million in future costs to remove PFCs from its groundwater.

187. The intrusion into the Foundation's property and water rights of PFCs caused, and is reasonably anticipated to cause, the Foundation to suffer in excess of \$7 million in damages, including loss of rents and revenue; loss of crops; loss of an ability to carry on an economic enterprise on and with its property; cost of treating its water in order to beneficially use it; and other response or remediation costs.

188. As a direct and proximate result of the conduct and other tortious acts and omissions of Defendant, Plaintiffs' water and property are being damaged and destroyed, causing economic loss.

THIRD CLAIM FOR RELIEF

Negligence

189. Plaintiffs incorporate all averments in this Complaint as if restated fully herein.

190. Defendant negligently disposed of PFCs and is failing to remediate PFC contamination.

191. In Colorado, a defendant is negligent when the defendant owes a duty to the plaintiff, the defendant breaches that duty, and the defendant's breach causes injury to the plaintiff. *Casebolt v. Cowan*, 829 P.2d 352, 356 (Colo. 1992).

192. Defendant owed, and still owes, a duty to Plaintiffs' to maintain its operations and property in a safe manner and to prevent a dangerous condition on Defendant's property from escaping its land and causing damage to Plaintiffs' neighboring land. *See Moore v. Standard Paint & Glass Co. of Pueblo*, 358 P.2d 33, 36 (Colo. 1960); *Haas v. Lavin*, 625 F.2d 1384, 1387 (10th Cir. 1980).

193. Defendant's standard of care is defined, at least in part, by the numerous directives that required special handling and disposal of AFFF containing PFCs.

194. Defendant breached its duty to manage its operations and property as a reasonably careful person by mishandling and discharging to the environment AFFF containing PFCs.

195. Defendant also breached its duty by failing to follow the standards and requirements of numerous directives that required special handling and disposal of AFFF containing PFCs.

196. The negligently discharged AFFF has contaminated the Widefield and Windmill Gulch Aquifers and Plaintiffs' property and water rights.

197. Defendant's negligence has caused Security to suffer in excess of \$6 million in damages in costs of securing and delivering alternate water supplies; costs of sampling and monitoring;

and other response or remediation costs. Security expects to incur in excess of an additional \$8.5 million in future costs to remove PFCs from its groundwater.

198. Defendant's negligence has caused the Foundation to suffer in excess of \$7 million in past and reasonably anticipated future damages, including loss of rents and revenue; loss of crops; loss of an ability to carry on an economic enterprise on and with its property; cost of treating its water in order to beneficially use it; and other response or remediation costs.

199. As a direct and proximate result of the conduct and other negligent acts and omissions of Defendant, Plaintiffs' water and property are being damaged and destroyed, causing economic loss.

CLAIM FOR RELIEF

WHEREFORE, Plaintiffs Security Water District and Pikes Peak Community Foundation respectfully request that this Court grant the following relief:

- a) Award Plaintiff Security \$1,770,915.58 for costs incurred by Security to acquire and deliver alternative water supplies through the SDS, the FVA, and CS-U in replacement of the groundwater supply contaminated by Defendant's actions;
- b) Award Plaintiff Security \$3,761,486.74 for costs incurred by Security to construct, install, and modify pipelines and other infrastructure necessary to take delivery of and distribute the alternative water supplies;
- c) Award Security \$33,721.94 for the cost adjusting management of water quality in its delivery system necessitated by the changes in infrastructure and shut down of its wells;

- d) Award Plaintiff Security \$36,221.00 for the cost of sampling and obtaining laboratory analysis for PFCs in its wells;
- e) Award Plaintiff Security \$25,186.20 for the cost of staff time and professional services to respond to public inquiries and manage public relations regarding the PFC contamination;
- f) Award Plaintiff Security \$8,587,000 for reasonably ascertainable future costs of operating, for a period of twenty years, a system to be installed by the United States for removal of PFCs from Security's water rights;
- g) Award Security \$843,389 for past and reasonably ascertainable future obligations on its water lease with Pikes Peak Community Foundation, or, in the alternative, award Pikes Peak Community Foundation \$843,389 for past and reasonably ascertainable future lost rent on the lease;
- h) Award Pikes Peak Community Foundation \$1,505,690 for past and reasonably ascertainable future losses of revenue from agricultural production resulting from contamination of the Foundation's irrigation water;
- i) Award Pikes Peak Community Foundation \$1,676,000 for the reasonably ascertainable cost of installing and operating for at least twenty years a treatment system to allow resumption of irrigation;
- j) Award Pikes Peak Community Foundation \$14,400 for water and soil testing costs incurred due to the groundwater contamination;
- k) Award Plaintiffs their costs incurred in this action; and
- l) Award Plaintiffs such other and further relief as the Court deems just.

Respectfully submitted this 5th day of March, 2019.

/s/ Scott A. Clark

Scott A. Clark (#24509)

Amanda L. Hemmerich (#50605)

BURNS, FIGA & WILL, P.C.

6400 S. Fiddlers' Green Circle, Suite 1000

Greenwood Village, CO 80111

Phone Number: 303-796-2626

Fax Number: 303-796-2777

E-mail: sclark@bfwlaw.com

ahemmerich@bfwlaw.com

**Attorneys for Plaintiffs Security Water
District and Pikes Peak Community
Foundation**